

Response to Office Action
S/N 10/772973

REMARKS

A. Status of Claims

Claims 4, 10, and 14-19 are pending. Claims 4 and 10 are amended herein.

B. Joint Inventors

The Examiner states that he presumes that "the subject matter of the various claims was commonly owned at the time any inventions covered therein were made, absent evidence to the contrary." It is unclear as to which prior art, if any, the Examiner is considering under 35 USC §103(a) and (c) that causes him to caution Applicants of the obligation to disclose ownership of claims not commonly owned vis-à-vis prior art. However, Applicants affirmatively state that the subject matter and all claims of *this* application were commonly owned or under a legal obligation to be assigned to the same business entity at the time the invention was made.

C. §103(a) Rejection

The Examiner has rejected claims 4, 10 and 14-19 under 35 USC 103(a) as being unpatentable over U.S. Patent 6,582,454 to Yayama in view of U.S. Patent 6,267,779 to Gerdes. A claim is *prima facie* obvious only if the prior art reference (or references when combined) teach or suggest all the claim limitations. MPEP §2143. Moreover, a prior art reference must be considered in its entirety, including portions that would teach away from the claimed invention. MPEP §2141.02; *W.L. Gore & Assoc., Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984). Finally, it is improper to combine references when one teaches away from the combination or renders the device inoperable for its intended purpose. MPEP §2145; see also *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. ___, 12 (2007) (explaining that if prior art that teaches away from the claimed combination, the claimed combination is more likely to be nonobvious).

Due to the claim amendments herein, independent claims 4 and 10 now contain the limitation that the multiple color laser beams do not intersect. Support for this amendment appears in Figures 4-7 and in corresponding paragraphs [0020] and [0023]-[0025].

Response to Office Action
S/N 10/772973

1. Yayama teaches away from using multiple laser beams that do not intersect.

Yayama fails to teach or suggest laser beams that do not intersect. Rather, Yayama teaches away from non-intersecting laser beams by requiring that its multiple colored laser beams be condensed and then projected onto the treatment target region at the same point: "The projecting part 3 is equipped with optical systems 31, 32 and 33, which respectively condense the blue, green and red laser beams at the same point." Yayama, col. 4, lines 17-19; see also Yayama, Figures 2 and 3 (illustrating the condensed laser beams).

Condensing the multiple laser beams into a single beam that acts on one location of a patient is critical to Yayama's invention. As explained in Yayama's disclosure, "the laser beams of blue, green and red act on the treatment object region 500 and collaborate thereon with one another so that the treatment effects can be improved." Yayama, col. 4, lines 50-53; see also Yayama, col. 2, lines 31-34 ("[T]he laser beams of the different colors related to different physiological actions collaborate with each other, so that the effects brought by LLT can be enhanced."). Further, each embodiment disclosed in Yayama requires condensing the beams:

"The projecting part 3 in each of the above-mentioned embodiments of the present invention condenses and projects the laser beams of blue, green and red in the same direction by the optical systems 31, 32 and 33. Alternatively, it is possible to form the optical systems 31, 32 and 33 by optical fibers so that ends of the optical fibers are arranged close to each other so as to condense the laser beams. The laser beams of blue, green and red emitted by the laser beam generating part 1 are propagated through the optical fibers and are condensed and projected onto the treatment object region 500."

Yayama, col. 5, lines 49-59

Accordingly, Yayama fails to teach or suggest one of Applicants' claimed limitations. Rather, Yayama teaches away from projecting multiple laser beams at

Response to Office Action
S/N 10/772973

multiple locations on a patient such that the laser beams do not intersect by requiring that for each embodiment of its invention the laser beams be condensed. Additionally, modifying Yayama's teachings to project its multiple laser beams at different locations would render it inoperable for its stated purpose of improving treatment results by collaboratively applying lasers of different colors to a single treatment region.

2. Gerdes teaches away from using multiple laser beams that do not intersect

Gerdes teaches away from using multiple laser beams that do not intersect. The Examiner states, however, in his advisory action that Gerdes is capable of producing non-intersecting beams, and therefore Applicants' invention is obvious. Applicants respectfully disagree.

First, similar to Yayama, Gerdes also fails to teach or suggest laser beams that do not intersect and instead teaches away from non-intersecting laser beams. According to Gerdes' disclosure, "the method of treatment of the present invention involves the exposure of the tissue to a plurality of converging beams of infrared radiation." Gerdes, col. 12, lines 57-59; see also Gerdes, Fig. 7 (illustrating how the laser beams should converge). Moreover, Gerdes specifically requires the laser beams to intersect because "[t]he intersection of the emitted . . . laser radiation significantly improves the absorption of the energy by the tissue at and proximate to the region or point of intersection "B" of the beams 127, 132." Gerdes, col. 13, lines 6-9. Gerdes discloses multiple handheld lasers "whereby the beams of infrared treatment lasers intersect" and a positioning device for maintaining laser wands so that the "therapeutic laser beams hav[e] an intersection region." Gerdes, Abstract; Gerdes, col. 12, lines 64-67; Gerdes, col. 13, lines 29-31.

Second, even if one assumes arguendo that Gerdes teaches multiple laser beams that do not intersect, it is still improper to combine Gerdes with Yayama to teach Applicants' claimed invention. As explained above, it is critical to Yayama's invention that the multiple laser beams be condensed for treatment purposes.

Response to Office Action
S/N 10/772973

Yayama, col. 4, lines 50-53; Yayama, col. 2, lines 31-34; Yayama, col. 5, lines 49-59. There would simply be no reason to combine Yayama with Gerdes if Gerdes teaches non-intersecting beams because Yayama teaches it would be inoperable if its beams were not condensed. In other words, using the independent beams of Gerdes and combining them with the multiple colored laser beams of Yayama achieves a result that contradicts the teachings of Yayama.

Accordingly, as with Yayama, Gerdes fails to teach or suggest one of Applicants' claimed limitations. Rather, Gerdes teaches away from projecting multiple laser beams at multiple locations on a patient such that they do not intersect, requiring instead that its laser beams intersect for proper treatment. Additionally, modifying Gerdes' teachings to project its multiple laser beams at different locations would render it inoperable for its stated purpose of improving energy absorption at the intersection region. Finally, if Gerdes is interpreted as teaching non-intersecting beams, then Yayama could not be combined with Gerdes because the combination directly contradicts the operation and purpose of Yayama's invention.

3. Yayama and Gerdes fail to render Applicants' claimed invention obvious.

Because the combination of Yayama and Gerdes teach away from non-intersecting multiple colored laser beams, because neither Gerdes nor Yayama independently teach or suggest multiple laser beams that do not intersect, and because Gerdes and Yayama actually teach away from non-intersecting laser beams, Gerdes and Yayama fail to disclose a claim limitation found in each of Applicants' independent claims 4 and 10. Because claims 14-19 depend from claim 10, Gerdes and Yayama also fail to disclose a claim limitation of claims 14-19. Accordingly, no prima facie case of obviousness has been established with respect to Applicants' remaining claims.

Therefore, Applicants respectfully request the Examiner withdraw the obviousness rejections and allow the application to proceed to issuance. If the

Response to Office Action
S/N 10/772973

Examiner does not allow the application to proceed to issuance, Applicants respectfully request that the Examiner enter the proposed amendment to place the application in better form for appeal.

CONCLUSION

Applicants respectfully submit that all objections and rejections have been traversed, and that the application is in form for issuance. Applicants respectfully request that the Examiner allow the application to proceed to issuance.

Respectfully submitted,



Sandra L. Etherton
Registration No. 36,982

Customer No. 33354
Etherton Law Group, LLC
5555 E. Van Buren St., Suite 100
Phoenix, Arizona 85005-3422
Tel: 602-681-3331 Fax: 602-681-3339